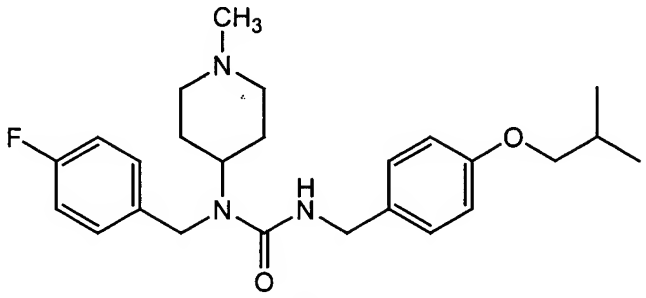
WHAT IS CLAIMED IS:

1. A composition comprising a compound of Formula (I):



(I)

and a pharmaceutically acceptable carrier.

2. The composition of claim 1, further comprising an additional therapeutic agent.

3. The composition of claim 2, wherein the additional therapeutic agent is selected from the group consisting of levodopa (SINEMET™, SINEMET-CR™, bromocriptine (PARLODEL™), pergolide (PERMAX™), ephenedrine sulfate (EPHEDRINE™), pemoline CYLERT™), mazindol (SANOREX™), d,1-α-methylphenethylamine (ADDERALL™), methylphenydate (RITALIN™), pramipexole (MIRAPEX™), modafinil (PROVIGIL™), and ropinirole (REQUIP™).

4. The composition of claim 2, wherein the additional therapeutic agent is an anti-dyskensia agent

5. The composition of claim 2, wherein the additional therapeutic agent is an anti-dyskensia agent selected from the group consisting of baclofen (Lioresal™), botulinum toxin (Botox™), clonazepam (Klonopin™), and diazepam (Valium™).

6. The composition of claim 2, wherein the additional therapeutic agent is an anti-dystonia, anti-myoclonus, or anti-tremor agent selected from the group consisting of baclofen (LIORESAL™), botulinum toxin (BOTOX™), clonazepam (KLONOPIN™), and diazepam (VALIUM™).

7. The composition of claim 2, wherein the additional therapeutic agent is an anti-psychotic agent with dopaminergic receptor antagonism.

8. The composition of claim 2, wherein the additional therapeutic agent is an anti-psychotic agent selected from the group consisting of chlorpromazine (THORAZINE™),

haloperodol (HALDOL™), molindone (MOBAN™), thioridazine (MELLARIL™), a phenothiazine, a butyrophenome, diphenulbutylpiperinde (pimozide), thioxanthines (fluphenthixol), substituted benzamides (sulpiride), sertindole, amisulpride, risperidone, clozapine, olanzapine, ziprasidone, aripiprazole, and their active metabolites (N-desmethylclozapine, N-desmethylolanzapine, 9-OH-risperdone)).

9. A method for treating a neurodegernative disease comprising:

identifying a patient suffering from a neurodegenerative disease; and

administering to the patient an effective amount of an inverse agonist selective for a serotonin receptor; whereby the dopaminergic therapy associated dyskinesia is reduced.

10. The method of claim 9 wherein the neurodegenerative disease is selected from the group consisting Parkinson's disease, Huntington's disease, Alzheimer's disease, Spinocerebellar Atrophy, Tourette's Syndrome, Friedrich's Ataxia, Machado- Joseph's disease, Lewy Body Dementia, Dystonia, Progressive Supranuclear Palsy, and Frontotemporal Dementia

11. The method of claim 9, wherein the serotonin receptor is a 5HT2A receptor.

12. The method of claim 9, wherein the serotonin receptor is a 5HT2C receptor.

13. The method of claim 9, wherein the inverse agonist binds to a 5HT2A receptor or a 5HT2C receptor.

14. The method of claim 9, wherein the inverse agonist is the compound of formula (I).

15. The method of claim 9, further comprises administering a dopaminergic agent in combination with the compound of formula (I).

16. The method of claim 9, wherein the reagent increases dopaminergic activity and is selected from the group consisting of levodopa, SINAMET™, SINAMETCR™, bromocriptine (PARLODEL™), pergolide (PERMAX™), ephenedrine sulfate (EPHEDRINE™), pemoline CYLERT™), mazindol (SANOREX™), d,1-α-methylphenethylamine (ADDERALL™), methylphenydate (RITALIN™), pramipexole (MIRAPEX™), modafinil (PROVIGIL™), and ropinirole (REQUIP™).

17. A method for treating dyskinesia associated with dopaminergic therapy comprising:

identifying a patient suffering from dopaminergic therapy associated dyskinesia;

administering to the patient an effective amount of an inverse agonist selective for a serotonin receptor; whereby the dopaminergic therapy associated dyskinesia is reduced.

18. The method of claim 17, wherein the serotonin receptor is a 5HT2A receptor.

19. The method of claim 17, wherein the serotonin receptor is a 5HT2C receptor.

20. The method of claim 17, wherein the inverse agonist binds to a 5HT2A receptor and a 5HT2C receptor.

21. The method of claim 17, wherein the inverse agonist is the compound of formula (I).

22. The method of claim 21, further comprising administering an anti-dyskensia agent in combination with the compound of formula (I).

23. The method of claim 22, wherein the anti-dyskinesia agent is selected from the group consisting of baclofen (Lioresal™), botulinum toxin (Botox™), clonazepam (Klonopin™), and diazepam (Valium™).

24. The method of claim 17, wherein the patient suffers from a neurodegenerative disease selected from the group consisting of Parkinson's disease, Huntington's disease, Alzheimer's disease, Spinocerebellar Atrophy, Tourette's Syndrome, Friedrich's Ataxia, Machado-Joseph's disease, Lewy Body Dementia, Dystonia , Progressive Supranuclear Palsy, and Frontotemporal Dementia.

25. A method for treating dystonia, myoclonus, or tremor associated with dopaminergic therapy comprising:

identifying a patient suffering from dopaminergic therapy associated dystonia, myoclonus, or tremor;

administering to the patient an effective amount of an inverse agonist selective for a serotonin receptor; whereby the dopaminergic therapy associated dystonia, myoclonus, or tremor is reduced.

26. The method of claim 25, wherein the serotonin receptor is a 5HT2A receptor.

27. The method of claim 25, wherein the serotonin receptor is a 5HT2C receptor.

28. The method of claim 25, wherein the inverse agonist binds to a 5HT2A receptor and a 5HT2C receptor.

29. The method of claim 25, wherein the inverse agonist is the compound of formula (I).

30. The method of claim 29, further comprising an anti-dystonia, anti-myoclonus, or anti-tremor agent in combination with the compound of formula (I).

31. The method of claim 30, wherein the anti-dystonia, anti-myoclonus, or anti-tremor agent is selected from the group consisting of baclofen (LIORESAL™), botulinum toxin (BOTOX™), clonazepam (KLONOPIN™), and diazepam (VALIUM™).

32. A method for treating psychosis associated with dopaminergic therapy comprising:

identifying a patient suffering from dopaminergic therapy associated psychosis;

administering to the patient an effective amount of an inverse agonist selective for a serotonin receptor; whereby symptoms of dopaminergic therapy associated psychosis is reduced.

33. The method of claim 32, wherein the serotonin receptor is a 5HT2A receptor.

34. The method of claim 32, wherein the serotonin receptor is a 5HT2C receptor.

35. The method of claim 32, wherein the inverse agonist binds to a 5HT2A receptor and a 5HT2C receptor.

36. The method of claim 32, wherein the inverse agonist is the compound of formula (I).

37. The method of claim 36, further comprising an anti-psychotic agent in combination with the compound of formula (I).

38. The method of claim 37, wherein the anti-psychotic agent is selected from the group consisting of chlorpromazine (THORAZINE™), haloperodol (HALDOL™), molindone (MOBAN™), thioridazine (MELLARIL™), a phenothiazine, a butyrophenome, diphenulbutylpiperinde (pimozide), thioxanthines (fluphenthixol), substituted benzamides

(sulpiride), sertindole, amisulpride, risperidone, clozapine, olanzapine, ziprasidone, aripiprazole, and their active metabolites (N-desmethylclozapine, N-desmethylolanzapine, 9-OH-risperdone)).

39. The method of claim 32, wherein the patient suffers from a neurodegenerative disease selected from the group consisting of Parkinson's disease, Huntington's disease, Alzheimer's disease, Spinocerebellar Atrophy, Tourette's Syndrome, Friedrich's Ataxia, Machado-Joseph's disease, Lewy Body Dementia, Dystonia , Progressive Supranuclear Palsy, and Frontotemporal Dementia.

40. A method for treating a neuropsyhiatric disease comprising:

identifying a patient suffering from a neuropsyhiatric disease; and

administering to the patient an effective amount of an inverse agonist selective for a serotonin receptor.

41. The method of claim 40 wherein the neuropsychiatric disease is selected from the group consisting of schizophrenia, schizoaffective disorders, mania, behavioral disturbances associated with dementia and psychotic depression.

42. The method of claim 40, wherein the serotonin receptor is a 5HT2A receptor.

43. The method of claim 40, wherein the serotonin receptor is a 5HT2C receptor.

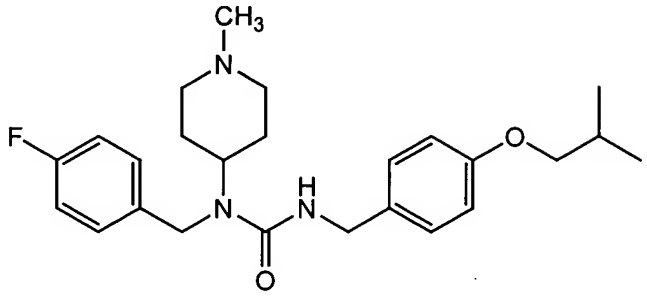
44. The method of claim 40, wherein the inverse agonist binds to a 5HT2A receptor or a 5HT2C receptor.

45. The method of claim 40, wherein the inverse agonist is the compound of formula (I).

46. The method of claim 40, further comprising administering an antipsychotic agent in combination with the inverse agonist, the anti-psychotic agent selected from the group consisting of chlorpromazine (THORAZINE™), haloperodol (HALDOL™), molindone (MOBAN™), thioridazine (MELLARIL™), a phenothiazine, a butyrophenome, diphenulbutylpiperinde (pimozide), thioxanthines (fluphenthixol), substituted benzamides (sulpiride), sertindole, amisulpride, risperidone, clozapine, olanzapine, ziprasidone, aripiprazole, and their active metabolites (N-desmethylclozapine, N-desmethylolanzapine, 9-OH-risperdone)).

47. The method of claim 46, wherein the inverse agonist is the compound of formula (I).

48. A compound having the structure of Formula (I):



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49. A method of inhibiting an activity of a monoamine receptor comprising contacting the monoamine receptor or a system containing the monoamine receptor with an amount of the compound of formula (I) that is effective in inhibiting the activity of the monoamine receptor.

50. The method of claim 49 wherein the monoamine receptor is a serotonin receptor.

51. The method of claim 50 wherein the serotonin receptor is the 5-HT2A subclass.

52. The method of claim 50 wherein the serotonin receptor is in the central nervous system.

53. The method of claim 50 wherein the serotonin receptor is in the peripheral nervous system.

54. The method of claim 50 wherein the serotonin receptor is in blood cells or platelets.

55. The method of claim 50 wherein the serotonin receptor is mutated or modified.

56. The method of claim 49 wherein the activity is signaling activity.

57. The method of claim 49 wherein the activity is constitutive.

58. The method of claim 49 wherein the activity is associated with serotonin receptor activation.

59. A method of inhibiting an activation of a monoamine receptor comprising contacting the monoamine receptor or a system containing the monoamine receptor with an

amount of the compound of formula (I) that is effective in inhibiting the activation of the monoamine receptor.

60. The method of claim 59 wherein the activation is by an agonistic agent.

61. The method of claim 60 wherein the agonistic agent is exogenous.

62. The method of claim 60 wherein the agonistic agent is endogenous.

63. The method of claim 59 wherein the activation is constitutive.

64. The method of claim 59 wherein the monoamine receptor is a serotonin receptor.

65. The method of claim 64 wherein the serotonin receptor is the 5-HT2A subclass.

66. The method of claim 64 wherein the serotonin receptor is in the central nervous system.

67. The method of claim 64 wherein the serotonin receptor is in the peripheral nervous system.

68. The method of claim 64 wherein the serotonin receptor is in blood cells or platelets.

69. The method of claim 64 wherein the serotonin receptor is mutated or modified.

70. A method of treating a disease condition associated with a monoamine receptor comprising administering to a subject in need of such treatment a therapeutically effective amount of the compound of formula (I).

71. The method of claim 70 wherein the disease condition is selected from the group consisting of schizophrenia, psychosis, migraine, hypertension, thrombosis, vasospasm, ischemia, depression, anxiety, sleep disorders and appetite disorders.

72. The method of claim 70 wherein the disease condition is associated with dysfunction of a monoamine receptor.

73. The method of claim 70 wherein the disease condition is associated with activation of a monoamine receptor.

74. The method of claim 70 wherein the disease condition is associated with increased activity of monoamine receptor.

75. The method of claim 70 wherein the monoamine receptor is a serotonin receptor.

76. The method of claim 75 wherein the serotonin receptor is the 5-HT2A subclass.

77. The method of claim 75 wherein the serotonin receptor is in the central nervous system.

78. The method of claim 75 wherein the serotonin receptor is in the peripheral nervous system.

79. The method of claim 75 wherein the serotonin receptor is in blood cells or platelets.

80. The method of claim 75 wherein the serotonin receptor is mutated or modified.

81. A method of treating schizophrenia comprising administering to a subject in need of such treatment a therapeutically effective amount the compound of formula (I).

82. A method of treating migraine comprising administering to a subject in need of such treatment a therapeutically effective amount of the compound of formula (I).

83. A method of treating psychosis comprising administering to a subject in need of such treatment a therapeutically effective amount of the compound of formula (I).

84. A method for identifying a genetic polymorphism predisposing a subject to being responsive the compound of formula (I), comprising:

administering to a subject a therapeutically effective amount of said compound; measuring the response of said subject to said compound, thereby identifying a responsive subject having an ameliorated disease condition associated with a monoamine receptor; and

identifying a genetic polymorphism in the responsive subject, wherein the genetic polymorphism predisposes a subject to being responsive to said compound.

85. The method of claim 84 wherein the ameliorated disease condition is associated with the 5-HT class or 5-HT2A subclass of monoaminergic receptors.

86. A method for identifying a subject suitable for treatment with the compound of formula (I), comprising detecting the presence of a polymorphism in a subject wherein the polymorphism predisposes the subject to being responsive to the compound, and wherein the presence of the polymorphism indicates that the subject is suitable for treatment with the compound of formula (I).